Testimony to the Blue Ribbon Commission on America's Nuclear Future Subcommittee on Reactor and Fuel Cycle Technology,
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Westinghouse proposes that the Commission chart a fundamentally new, materially-integrated approach for nuclear fuel cycle policy. The new approach and resulting strategy must be developed through unprecedented collaboration among licensors, investors, scientists, industry, and the public, including organized opposition groups and the local communities that already host reactor plants and fuel processing facilities. The goal is to deliver a fuel cycle that is publically acceptable with greater fuel cycle economics and improved environmental performance.

In a fresh approach, physics-driven fuel cycle processes should be debated without bias for specific technologies. The resulting strategy should emphasize a holistic, sustainable mining-to-disposition approach with emphasis on two dimensions: 1) fuel efficiency and waste prevention, and, 2) waste standards that do not require vigilance over an excessive period of time.

The sophisticated and collaborative licensing process of the Nuclear Regulatory Commission (NRC) must be brought to bear earlier in the technology development process to identify issues to be addressed and reduce the risk of technical innovation later in the process. To support this need, the NRC needs more resources now to prepare for the technologies and processes that emerge from an integrated fuel-cycle strategy. They will need to be prepared to evaluate and efficiently perform confirmatory testing to ensure public safety without delaying the industry as it adapts to an integrated strategy.

Roles for federal agencies should be aligned to facilitate more politically and financially visible leadership in the U.S. for an improved, more sustainable, publically acceptable fuel cycle safety standard. Sustained visibility for policy that is supportive of industry growth would enable U.S. companies to be positioned for quicker market capture domestically and internationally to ensure steady industry growth and the job-making and baseload energy system transformation that is produced.

Westinghouse provides approximately 54 percent of the nuclear fuel to the U.S. pressurized and boiling water reactor market. This expertise provides exceptional strategic insight about fuel management, including the physics, financial, technical and regulatory aspects of every stage of the fuel cycle, for almost every fuel.

Westinghouse has vast experience in reactor design and innovation, thus a portfolio of intellectual properties, including the liquid metal fast breeder reactor (LMFBR) and other liquid metal and fast reactor designs that are especially effective for addressing reprocessing and remanufacturing of fuel for greatest efficiency. Westinghouse technology leadership includes the Generation III+ AP1000TM design – the safest, most economical nuclear power plant available in the worldwide marketplace and the only licensed, passive design reactor currently being built on schedule and within budget in China and the United States. Westinghouse reactor design also includes more than 15 years of experience in the development of smaller modular reactors.